

ABSTRACT

The present invention is a method of decontaminating a structure contaminated by pathogenic microorganisms such as *bacillus anthracis* and its spores, *B. subtilis var niger* and its spores, and *B. stearothermophilus* and its spores, comprising the steps of

5 sealing a contaminated structure sufficiently to enable retention of a gas, introducing methyl bromide gas into sealed contaminated structure to a concentration of methyl bromide in an amount sufficient to deactivate said pathogenic microorganisms and disable germination of pathogenic bacteria spores, and maintaining said sealed contaminated structure with said concentration of methyl bromide at a sufficient

10 temperature for a sufficient period of time, and deactivating said pathogenic microorganisms and disabling germination of said pathogenic bacteria spores associated with said contaminated structure. The method is performed approximately in the range of 20°C to 40°C, and the concentration of methyl bromide is about 80 mg/l to 303 mg/l during the decontamination. Humidity is not a factor in the efficacy of this

15 treatment process.